



ENVIRONMENT

1,064

COMMUNITY GARDENS IN THE PARIS REGION COVERING A SURFACE AREA OF 879 HECTARES.

594 FAMILY GARDENS AND 255 SHARED GARDENS.

11,400 INHABITANTS PER COMMUNITY GARDEN IN THE PARIS REGION.



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THE REVIVAL OF COMMUNITY GARDENS IN THE PARIS REGION

COMMUNITY GARDENS, WHICH GREATLY APPEAL TO BOTH PRIVATE INDIVIDUALS AND LOCAL AUTHORITIES, HAVE ENJOYED A REVIVAL IN RECENT DECADES. INDEED, THEY PROVIDE A RESPONSE TO TODAY'S URBAN CHALLENGES: HEALTHIER EATING, THE CREATION OF SOCIAL LINKS AND SUSTAINABLE DEVELOPMENT OF TOWNS AND CITIES THROUGH PARTNERSHIPS AND REGIONAL MAPPING. IAU AND ITS REGIONAL BIODIVERSITY AGENCY (ARB), INRA AND THREE SPECIALISED NON-PROFIT ORGANISATIONS, PROVIDE A DETAILED OVERVIEW OF THESE GARDENS, THEIR LOCATIONS AND FUNCTIONS.

ommunity gardens perform food-related, social and urban planning roles in large urbanized areas. They are a reflection of society, its crises and expectations, and have managed to evolve over time. However, there is a great diversity of realities behind the term "community garden". Family gardens, shared gardens, social integration gardens, etc. each have their own diverse histories, geographies and functions. Studies are beginning to be conducted, but the exact number, surface areas and locations of such gardens in the Paris Region had remained to be specified. A joint study between the French National Institute for Agricultural Research (INRA)¹, the Paris Region Development and Urban Planning Institute (IAU), the Regional Biodiversity Agency (ARB) and three non-profit organisations² non-profit organisation has made it possible to conduct regional mapping of the gardens, to draw initial quantitative lessons and to gain further knowledge about gardens and their interactions with the urban environment and its inhabitants.

A SHORT HISTORY OF COMMUNITY GARDENS

The history of community gardens dates back to the 19th century and the industrial revolution. Peasants began leaving the countryside to settle in towns, increasing the urban working-class population. Gardens offered people who lived in harsh conditions a means of subsistence, as demonstrated by the names given to them at that time: "fields or gardens for the poor" in England and Germany. In France, they were called "jardins ouvriers" (workers' gardens). In a spirit of paternalism, employers frequently offered their workers housing and an allotment of land. Gardens therefore played a subsistence but also a social role, offering a form of leisure and a framework for family life. In the 1850s, religious confederations also began creating gardens for the deprived and destitute. Thus, in 1896, Father Lemire, a priest and member of parliament for the constituency

Cover

Event held in the Univert solidarity shared garden in Paris.

THREE MAJOR NON-PROFIT ORGANISATIONS IN THE PARIS REGION

Three large non-profit organisations bring together most of the community gardens in the Paris Region. The oldest, the Federation Nationale des Jardins Familiaux et Collectifs (FNJFC), celebrated its 120th anniversary in 2016. It was founded in 1896 by Father Lemire under the name Ligue Francaise du Coin de terre et du foyer (the name remained in force until 1952) and was recognized as a public interest organization in 1909. According to the Ministry of Agriculture, the aim of this organization is to create, rehabilitate, develop, manage and coordinate family gardens and offers local authorities, in particular municipalities, the knowhow and experience of its design office. A local branch of the organization devoted to the Paris Region gardens has existed for several years.

The Jardinot non-profit organisation, created in 1942 and named Jardin du Cheminot (the Railway Worker's Garden), creates its own family and community gardens. Jardinot often purchases non-viable land and leases it to the French National Railways (SNCF) and French Rail Network (RFF) or it develops projects in partnership with local authorities. This nonprofit organisation was initially reserved for the railway industry, but since 2015 it has opened up to collectives and employees in all sectors

Founded in 2001, the Graine de Jardins is a non-profit organisation that aims to develop and operate shared gardens in the Paris Region. It operates on a regional scale and is part of the national network of shared gardens. The "Jardin dans Tous ses États" was created in 1997 with the support of the Fondation de France. Graine de Jardins does not manage garden sites but supports the creation of gardeners' collectives and municipal gardening programmes that involve different non-profit organisations.

of Le Nord, established the Ligue Française du Coin de Terre et du Foyer (French league, for small plots of land and households) which provided allotments of land to help feed households. Supported by the Ministry of Agriculture, workers' gardens rapidly expanded during the First World War, increasing in surface area from 1,000 to 15,000 hectares between 1916 and 1918. At the same time, other types of gardens such as hospital gardens, school gardens and gardens for war veterans spread. Their number increased during periods of shortage or conflict, in particular during the crisis of the 1930s and during the Second World War, during which 250,000 allotments were recorded in France.

The post war years saw a sharp decrease in the number of workers' gardens. The more favourable economic context, but also urban sprawl which reduced the size of these allotments, explain this decline. Renamed "family gardens" owing to the improved living standards of the gardeners and to have people forget their working-class background, they received legal recognition in 1952. The Royer Law (1976) granted land development and rural establishment companies (SAFER) and local authorities the right of pre-emption to acquire and develop these gardens, but it failed to slow their decline. Their surface area in the Paris Region decreased from 1,600 hectares in 1950.

By contrast, the 1970s saw a new form of garden develop across the Atlantic, in particular on urban wasteland, reflecting the wish to add "greenery to the city" (the green guerrilla movement). Community gardens were initiatives that involved local people and the sharing of land with a strong emphasis on community projects. They contributed to improving the living environment of disadvantaged neighbourhoods and to animating local culture (shows, etc.).

In the late 1980s, the trend towards collective appropriation reached France, diversifying both the formats and aims of gardens. In 1997, the informal "Le Jardin dans tous ses états" network was created to promote shared gardens. The cities of Lille, Lyon and Nantes were pioneers in this regard, followed by Paris in the early 2000s. Gardens designed for the purpose of social integration³ also began to appear and received legal recognition in 1998. A regional collective was formed in the Paris Region and remained active until 2012.

A draft bill on family gardens and social integration gardens submitted to the Senate in July 2002⁴, bears witness to the official recognition of this increasingly popular policy even though in the end the draft bill was not ratified.

The increasing concerns for sustainable development in urban planning projects stimulated renewed interested in community gardens. Today, they have undergone a true rebirth with a sharp increase in their number and surface area as well as a diversification of their forms (individual allotments, collective allotments, etc.) and their functions: subsistence, social, environmental and urban planning. "Family gardens, which have existed for over a century, have aroused renewed enthusiasm while new formats of collective gardens, including shared gardens and social integration gardens, more focused on social or cultural objectives, have appeared and developed" [Tozzi, d'Andrea 2014, Grandchamp, 2012]. In response to these developments, the Fédération nationale des jardins familiaux changed its name in 2006 to the Fédération nationale des jardins familiaux et collectifs (National Federation of Family and Community Gardens).

THE PARIS REGION: SHARING KNOWLEDGE ABOUT COMMUNITY GARDENS

The growing interest among citizens and local authorities in community gardens, their role in making towns and cities more appealing and "liveable", and the multiple functions they perform are unquestionable. And yet, the notion of "community garden" needs to be further clarified: indeed, it is loosely defined and not standardized and there is little information on its spatial dimension (size, specific location, number of allotments, etc.). Moreover, information on these gardens is not centralized and remains scattered between municipalities and non-profit organisations. The disconnect between knowledge about community gardens and their popularity has generated demand for quantitative and qualitative research.

The mapping of gardens and a partnership agreement

In this context, a study on community gardens in the Paris Region was initiated by INRA, IAU, leading garden federations and the ARB. The study was part of the "Villes et Bâtiments Durables" (Sustainable Cities and Buildings) programme launched by the French National Research Agency (ANR) under the JASSUR project (non-profit organisation urban community gardens and sustainable towns and cities), started in 2012, with the aim of localising community gardens in the Paris Region and quantifying their surface areas. The aim of the study was also to establish a methodology that can be reproduced by other regions and local areas.

This study, which brought together researchers, political and institutional stakeholders and nonprofitorganisations, made it possible to pool data and labour forces. The signing of a joint agreement in 2016 marked a new stage in the history and recognition of community gardens in the Paris Region.

The Paris Region has over 1,000 gardens: their typology, functions and distribution

The initial phase of this partnership led to the listing of 1,064 community gardens in the Paris Region covering a total surface area of 879 hectares. They are divided between:



LOCATE, QUANTIFY AND MAP COMMUNITY GARDENS: METHODOLOGICAL REVIEW

The creation of the database recording community gardens in the Paris Region is the outcome of long and painstaking work to collect, check and map data on behalf of IAU, INRA and different non-profit organisations. IAU has conducted different studies on gardens, initially by drawing on the Land Use Mode (MOS). Although the latter includes a "family gardens" category, it is not detailed enough to accurately calculate surface areas. In 2014 community gardens were included in the inventory of public green spaces that IAU has conducted among municipalities every four years since 1990, but there has been little feedback on this subject. INRA has contacted different local bodies and has mapped all unidentified gardens through photo interpretation and by conducting searches on the Internet. Non-profit organisations have supplied lists of their members. Today, out of the 1,064 gardens included in the database, specific categories (family gardens, shared gardens, social integration gardens, etc.) have been defined for 861 of them. While the 203 remaining gardens have the features of community gardens (a large vegetable garden divided into allotments), they can only be classified by conducting an on-site audit. This work remains to be done.

The updating of the existing database will require the participation of nonprofit organisations and local authorities to communicate information on newly created gardens, gardens that have disappeared and gardens that have changed. This will entail regional mapping to ensure the consistency, uniformity and monitoring of such data over time.





The Fosse Sablonnière Community Gardens, Saint-Denis county Family gardens: 34 allotments covering 9,100 sg. m.

Saint-Denis contains a number of family gardens which bear witness to the working class and vegetable garden history of the Seine-Saint-Denis "département" (county). Among them, the community gardens of la Fosse Sablonnière, laid out in the Clos Saint-Lazare park and next to a social integration garden and one of the last farms in the county, perpetuate the tradition of vegetable growing in a different way. This garden not only provides food but offers a natural environment, prevents urban isolation and promotes environmental values (by-laws prohibit the use of chemical fertilizers). An agreement links the town council, which owns the allotments, with the Fédération Nationale des Jardins Familiaux et Collectifs which manages the site. Gardeners who wish to work there submit their applications directly to the Federation.



The Gally Vegetable Gardens, Saint-Cyr-I'École, Yvelines county Family gardens: 80 allotments covering 35,000 sq. m.

Created in 2014 on an allotment covered with landfill unsuited for crop-growing, the site, which was laid out and is managed by the neighbouring farm of Gally also includes greenhouses that grow fruit and vegetables sold in baskets and an urban agriculture demonstration area. These "gardens for rent" develop an offering that meets urban demand featuring an automatic watering system and raised containers to facilitate tilling the land. Subscribers can also obtain advice from a market gardener. The project is part of the "Les fermes en Ville" initiative launched by the non-profit organisation "Le Vivant et la Ville" whose aim is to "offer an innovative solution to rehabilitating abandoned land in the city and its surroundings".



The La Douve Gardens, Paris

Shared Garden: within green spaces covering 7,000 sq. m.

The garden was developed in the Anna-Marly garden created in 2013 under the Great Urban Renewal Plan (GPRU) launched in Paris in 2001 and on the newly slabbed section of the ring road.

It enables inhabitants who live in neighbourhoods adjoining the city of Paris and the suburbs of Malakoff and Vanves to meet in an eco-friendly garden (with a watering system using rainwater, ban on the use of chemicals, etc.). The allotments are laid out with a layer of vegetable earth placed over a drainage layer to evacuate water. This garden is part of the Main Verte programme conducted by the Paris city hall.



Dionysian Gardens for Sustainable Development, Saint-Denis county Social integration garden: 10,000 sq.m.

Gardens for social integration are a recent form of urban agriculture. They were recognised and regulated by the Framwork Law of 27 July 1998 aimed at combating social exclusion. For the last 20 years, the Territoires non-profit organisation has helped disadvantaged people in the town of Saint-Denis by organizing workshops on organic vegetable gardening in the Dionysian Gardens devoted to sustainable development. Unqualified young people, the long-term unemployed, individuals on social welfare or income support (RSA or ASF benefits), migrants authorized to stay in France for the first time and refugees are trained and taught professional skills by the non-profit organisation to enable them to find jobs on the labour market. Some 30 employees work on one hectare of vegetable gardening land provided by the town council. A large range of fruit and vegetables is produced and sold in baskets to members of the non-profit organisation which has its own shop in the town centre.

• family gardens (60% of the total number and 80% of the surface area of community gardens in the Paris Region) out of a surface area of over 700 hectares, with large allotments (1.2 hectares on average versus 0.8 hectares for all community gardens). There are relatively few of them in Paris and at the heart of the Paris agglomeration but they are widespread in the surrounding urbanized municipalities;

• **shared gardens** (24% of the total number of community gardens out of only 3% of their total surface area *i.e.* 27 hectares), ten times smaller than family gardens (1,000 sq. m. per garden on average). They are heavily concentrated in the city of Paris and in its adjoining municipalities, in particular in the north and to the east of the city;

- gardens for the purpose of social integration;
- therapeutic gardens;
- gardens that claim to offer group gardening activities (gardens for activists).

The smallest community garden identified, the Simplon-aux-Champs in the 18th district of Paris, has a surface area of 25 sq.m. The largest community garden, the Crosne family garden in the Essonne "département" (county), extends over 25 hectares. In the city of Paris, five hectares are devoted to community gardens. Thus, 142 small gardens with an average surface area of 360 sg. m. have been slotted into the capital despite its high built-up density. Paris has 15,500 inhabitants per community garden versus 11,400 in the Paris Region as a whole. The creation of community gardens in the Paris Region has gained considerable momentum: three new community gardens were created in 2003 versus 142 in 2014. With a total of 186 gardens, the Val-d'Oise "département" is the county with the largest number of community gardens. They cover very large surface areas (11,460 sq. m. per garden) and with fewer inhabitants per community garden: 6,572 inhabitants per one community garden *versus* 27,700 in Hauts-de-Seine "département" (county).

A social and environmental asset

The distribution of community gardens is worth analysing from an urban planning, social and environmental viewpoint. Quite logically, they are concentrated in the region's most urbanized areas (at the heart of the agglomeration, in urban centres in rural districts, etc.) and in areas with specific challenges.

Their location is correlated with low-income households: 22% of these households are in community garden zones *versus* 17% on average in the Paris Region as a whole. Whereas community gardens are occasionally criticized for being gardens reserved for "yuppies", the correlations between their location and the location of less privileged districts as well as their actual and potential food and social roles deserve to be analysed in greater depth.

From an environmental viewpoint, it is noteworthy that community gardens are mainly located in areas that lack green spaces. For the city of Paris and its inner ring, two thirds of areas that include community gardens coincide with areas in which green spaces cover less than 10 sq. m. per inhabitant (the minimum surface area of local green spaces per inhabitant laid down in the Paris Region Master Plan/SDRIF). Gardens form a patchwork of green spaces that sustain biodiversity. The ARB has incorporated these gardens into the database of its Urban Agriculture and Biodiversity Observatory.



Distribution of community gardens by county in the Paris Region

Sources: IAU, INRA BD JColl 2015, Graine de Jardins, FNJFC, Jardinot, JASSUR, Montreuil city hall, Paris Region Council, AEV, Paris city hall

AGRICULTURE AND NATURE ARE CENTRAL TO THINKING ON THE CITY

"The multi-functionality of gardens" is not an empty phrase. In the scientific literature, gardens are associated with no less than eight fields of intervention [Duchemin *et al.*, 2008]: urban planning, the environment, the economy, food safety, health, leisure, education and social interactions. Urban gardens are therefore intermediate spaces between towns, the natural environment and agriculture which are intended to protect biodiversity while at the same time contributing to the physical, mental and social well-being of gardeners and lie at the crossroads between a variety of cultures.

The research conducted at municipal or agglomeration level on food systems (in the agglomerations of Nantes, Lyon, Montpellier, etc.) increasingly includes, for example, community gardens as non-professional forms of urban agriculture. This spatialisation dimension of urban agriculture is particularly meaningful with a view to drawing up public policies, especially in the food sector. The creation of social bonds and congeniality also appear as key functions, while in certain urban development policies they even play a major role in food safety and social justice, especially in American low-income neighbourhoods. Finally, community gardens are islands of natural freshness and biodiversity that contribute to the green fabric of the city. The "Main Verte" Charter of shared gardens in Paris prioritizes environmental management (avoidance of chemical inputs, prevention of water wastage, development of composting, etc.).

All the above considerations are closely linked and are now incorporated into the way in which towns and cities are weaved together. Public gardens have therefore become a key component in urban planning policies. In this regard, a significantly higher number of projects aimed at creating community gardens were entered into the national Eco-Neighbourhoods competition in 2011. The Paris Region supports community gardens through several schemes: the Plan Vert (Green Plan), transitory urban planning, etc.

GARDENS WILL BE CENTRAL TO FUTURE PUBLIC POLICIES

These avenues of reflection are an inducement to pursuing the study of gardens and their interaction with towns, cities, their inhabitants and social, eating and leisure practices.

In the Paris Region, the agreement signed in 2016 on community gardens plans to update the database every four years. It aims to analyse the number and surface areas of community gardens over the long term, focusing on their emergence, disappearance and mobility in response to changing towns and cities on the move. The research produced since 2014 should therefore be continued and developed by researchers in different disciplines. Public gardens are now recognized as providing green amenities. As such, they are included in the thinking on environment and social inequalities developed by IAU. Studies are therefore planned to take community gardens into account in urban planning documents with the aim of identifying systems of regional governance according to the typology towns and cities.

Geographers are interested in locating gardens according to components of the landscape (water courses, railway tracks). Private vegetable gardens could also be mapped in the same way as they have been in the city of Chicago. Cartographic data usefully combined with data on soil pollution could meet the increasing concerns for the sustainable supply of food.

Many avenues of research must be explored in order to understand why and how gardens play a key role in our lives, towns and cities. Work must continue to support and accompany the development of community gardens in urban planning, social, food and environmental policies.

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1. Study conducted as part of the JASSUR research programme (urban community gardens and sustainable towns and cities) of the French National Research Agency (ANR).

- 2. National Federation of Family and Community Gardens, Gardenot et Graine de Gardens.
- Gardens created or designed to reintegrate socially excluded or professionally disadvantaged people.
 https://www.senat.fr/leg/ppl01-368.html.

4. https://www.senat.in/teg/ppt01-300.htt

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